10049328

=> s gabamide

L1 . 1 GABAMIDE

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 13031-62-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN Butanamide, 4-amino-, monohydrochloride (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Butyramide, 4-amino-, hydrochloride (6CI, 7CI)

OTHER NAMES:

CN 4-Aminobutanamide hydrochloride

CN 4-Aminobutyramide hydrochloride

CN Gabamide hydrochloride

MF C4 H10 N2 O . Cl H

LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

CRN (3251-08-9)

● HCl

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 30 REFERENCES IN FILE CA (1907 TO DATE)
- 30 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file medicine

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY SESSION

7.35

7.56

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FILE 'USPAT2' ENTERED AT 21:25:10 ON 16 AUG 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> s ll or gabamide L2 113 L1 OR GABAMIDE

=> s spastic or seizure or tremor
L3 445901 SPASTIC OR SEIZURE OR TREMOR

=> s 12 and 13

L4 3 L2 AND L3

=> dup rem
ENTER L# LIST OR (END):14

DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L4
L5 3 DUP REM L4 (0 DUPLICATES REMOVED)

=> d 15 1-3 ibib, kwic

ANSWER 1 OF 3 USPATFULL on STN

ACCESSION NUMBER: 2006:167885 USPATFULL

TITLE: Use of GABA agonists for the treatment of

spastic disorders, convulsions, epilepsy, and

neuroprotection

INVENTOR(S): Meythaler, Jay M., Grosse Pointe Farms, MI, UNITED

STATES

Peduzzi, Jean D., Northville, MI, UNITED STATES

PATENT ASSIGNEE(S): The UAB Research Foundation, Birmingham, AL, UNITED

STATES (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2006142396 A1 20060629 US 2006-327137 A1

APPLICATION INFO.: 20060106

Continuation-in-part of Ser. No. US 2002-49328, filed RELATED APPLN. INFO.: on 15 May 2002, PENDING A 371 of International Ser. No.

WO 2000-US21886, filed on 10 Aug 2000

NUMBER DATE

PRIORITY INFORMATION: US 1999-148159P 19990810 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON &, CITKOWSKI,

P.C., P.O. BOX 7021, TROY, MI, 48007-7021, US

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 601

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Use of GABA agonists for the treatment of spastic disorders,

convulsions, epilepsy, and neuroprotection

SUMM . The subject invention relates to the use of gamma-aminobutyric acid (GABA) analogs and, more specifically, to the treatment of

spastic disorders, convulsions, and epilepsy or affording

neuroprotection by administering gamma-aminobutyramide and/or any drug or compound which is broken down to.

SUMM 1999; 80: 13-9. Imbalances in the levels of GABA in the central nervous system can lead to conditions such as spastic disorders, convulsions, and epileptic seizures. As described in U.S. Pat. No. 5,710,304, when GABA levels rise in the brain during.

SUMM Wilson et al., European J. Pharmacol. 1978; 51: 323-330; Kroin et al., Exp. Brain Research 1984; 54: 191-194) and genetically

spastic animals (Klockgether et al., Neurosci. Lett. 1989; 97: 221-226). DETD The present invention provides a method for treating neuronal

conditions or disorders often associated with traumatic brain injury, including dystonia/spasticity, spastic disorders, convulsive disorders, tardive dyskinesia, pain or epilepsy, as well as providing neuroprotection by administering via intrathecal, intraventricular, or intravenous routes to a patient or subject having dystonia/spasticity, a spastic disorder, a convulsive disorder, pain or epilepsy a therapeutically effective amount of the compound gamma-aminobutyramide, analogs, substituted forms, derivatives, the.

DETD Those skilled in the art are easily able to identify patients or subjects having dystonia/spasticity, spastic disorders,

convulsive disorders, epilepsy or otherwise in need of neuroprotection. For example, patients who have sustained traumatic brain injury induced.

DETD Gamma-aminobutyramide, or pharmaceutically acceptable salts thereof, is intravenously administered for prophylactic neuroprotection, therapeutic neuroprotection, or otherwise to treat dystonia/spasticity, a spastic disorder, a convulsive disorder, pain, or epilepsy. Gamma-aminobutyramide or a pharmaceutically acceptable salt thereof is administered intravenously in a continuous. . . the spasticity score in rats with severe spinal cord injury and spasticity. Additionally, side effects associated with intravenous administration of GABAmide appear to be negligible. While the mechanism of GABAmide transport across the blood-brain barrier remains unknown, intravenous administration of GABAmide or a pharmaceutically acceptable salt thereof in doses ranging from 1-40  $\mu g$  per kg per day by intravenous administration yields. . . exponential dosage decrease functions. Additionally, it is appreciated that gamma-aminobutyramide is provided prior to and/or subsequent to neurosurgery to ameliorate spastic or convulsive side effects associated with incidental tissue damage.

DETD Therapeutic Use of Intrathecal Gamma-Aminobutyramide (GABAmide

DETD A study on the use GABAmide was performed to compare its effectiveness to reduce spasticity and assess toxicity via intrathecal delivery in a chronic spastic SCI rat model utilizing an implantable refillable pump.

DETD Design--Rats were randomized to a blinded three-arm study utilizing GABAmide, baclofen and placebo in a crossover design. The pump has the advantage that the solution in the pump can be changed so that drugs can be evaluated. GABAmide was placed in the pumps and the animals were evaluated at the times specified below.

DETD Results--After six days of treatment the five rats with 5 micrograms per day of intrathecal GABAmide the mean spasticity score decreased from 2.4 SD+0.7 to 1.5 SD+0.5 (p=0.006, Friedman's). The maximal decrease with the GABAmide was at day two when the tone decreased to 1.1 SD+0.9 (Wilcoxon signed rank) before there was accommodation at day. . . 1.3 SD+0.5 (p=0.0431, Wilcoxon signed rank) but again there was accommodation at day five which was greater than with the GABAmide and approached statistical significance (p=0.0679, Wilcoxon signed rank). There were not statistical changes between the washout periods with the normal. . . rank) (see FIG. 1). There was not statistically significant change in the BBB score nor with beam walking with the GABAmide throughout the study. There was a decrease in the BBB score from 5.2 SD+4.1 to 2.7 SD+4.1 when the peak.

DETD . . . well tolerated for periods of time longer than those reported in the preclinical trials of baclofen. It also appears that GABAmide has less accommodation to spasticity than baclofen.

The procedures of Example 1 were repeated with the exception that GABAmide administration was intravenous instead of intrathecal with all dosages being doubled to account at least in part for limitations of. . .

DETD Prophylactic Neuroprotective Use of Intrathecal GABAmide

DETD A study on the use of GABAmide was performed to determine the effectiveness in maintaining motor function via intrathecal delivery prior to simulated ischemic cell death.

DETD . . . Each rat was given a daily dosage of 60  $\mu$ l per day of either saline or saline containing 5  $\mu$ g **GABAmide** for seven days prior to local infusions of the glutamate analog

N-methyl-D-aspartate to cholinergic nerve cells according to the procedure of Guilhaume et al., Cell Mol. Neurobiol. 2001; 21(1): 81-90. GABAmide or saline treatments were continued six days after N-methyl-D-aspartate initiated ischemic cell death with assessments being performed for spasticity, BBB score and beam walking as detailed in Example 1. The group treated with GABAmide prior to injury show decreased spasticity with no appreciable difference in BBB score or beam walking noted.

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ACCESSION NUMBER: 95181947 EMBASE

DOCUMENT NUMBER: 1995181947

TITLE: Pharmacokinetic analysis and antiepileptic activity of

N-valproyl derivatives of GABA and glycine.

AUTHOR: Hadad S.; Bialer M.

CORPORATE SOURCE: Department of Pharmacy, Faculty of Medicine, The Hebrew

University, PO Box 12065, Jerusalem 91120, Israel

SOURCE: Pharmaceutical Research, (1995) Vol. 12, No. 6, pp.

905-910. .

ISSN: 0724-8741 CODEN: PHREEB

COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 050 Epilepsy

030 Pharmacology

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 12 Jul 1995

Last Updated on STN: 12 Jul 1995

AB . . . four conjugation products of valproic acid (VPA), glycine and GABA were investigated: valproyl glycine, valproyl glycinamide, valproyl GABA and valproyl gabamide. Results. Only valproyl glycinamide showed a good anticonvulsant profile in both mice and rats due to its better pharmacokinetic profile. . .

CT Medical Descriptors: \*pharmacokinetics

\*seizure

animal experiment
animal model
anticonvulsant activity
article
controlled study
dog
female

high performance liquid chromatography intravenous drug administration

male

neurotoxicity

nonhuman

oral drug administration

pharmacodynamics physical chemistry priority journal

structure activity relation

\*4 aminobutyric acid: PD, pharmacology

\*4.

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ACCESSION NUMBER:

82114136 EMBASE

DOCUMENT NUMBER:

1982114136

TITLE:

 $\gamma$ -Aminobutyric acid (GABA) receptor stimulation. I.

Neuropharmacological profiles of progabide (SL 76002) and SL 75102, with emphasis on their anticonvulsant spectra.

AUTHOR:

Worms P.; Depoortere H.; Durand A.; et al.

CORPORATE SOURCE:

Res. Dept., Synthelabo, Paris, France

SOURCE:

Journal of Pharmacology and Experimental Therapeutics,

(1982) Vol. 220, No. 3, pp. 660-671. .

CODEN: JPETAB

COUNTRY:

United States

DOCUMENT TYPE:

Journal

FILE SEGMENT:

037 Drug Literature Index

030

Pharmacology 800 Neurology and Neurosurgery

050 Epilepsy

LANGUAGE:

English

ENTRY DATE:

Entered STN: 9 Dec 1991

Last Updated on STN: 9 Dec 1991

(GABA) receptor agonist which readily enters the brain. In the body, progabide is metabolized to three active metabolites: SL 75102, gabamide and GABA. Progabide and SL 75102 readily enter the brain and GABA and gabamide are also formed within this organ. Both progamide and SL 75102 exhibit a broad spectrum of anticonvulsant activities against seizures.

Medical Descriptors:

\*4 aminobutyric acid h 3 \*4 aminobutyric acid c 14

\*audiogenic seizure

\*convulsion

\*electroconvulsive therapy

\*pharmacokinetics \*progabide c 14 drug interaction central nervous system

animal experiment drug blood level

mouse

drug cerebrospinal fluid level

\*progabide acid

\*4 aminobutyric acid

\*4 aminobutyric acid receptor

\*anticonvulsive.

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY SESSION

67.36 74.92

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